Appendix A
Milestones

The strategic milestones associated with JTAV have been grouped into two tables. Table Appendix A -1 consists of JTAV Office milestones grouped according to major tasks associated with the implementation of the "to be" system architecture. Table Appendix A -2 consists of actions for organizations external to the JTAV Office. These milestones are explained at the end of Table Appendix A -2. The strategy related to each task is identified in both tables.

Table Appendix A -1. JTAV Office Milestones

Task number	Strategy	Action task	Lead office	Date
1.1	I, II	Perform system engineering	JTAV Office	
1.1.1	I, II	Resolve security issues (high to low)	JTAV Office	Jun 99
1.1.2	I, II	Resolve security issues (access control)	JTAV Office	Sep 99
1.1.3	I, II	Ensure communications capacity and infra-structure is adequate	JTAV Office	Notes 1,2
1.2	I, II	Design and develop "to be" system architecture	JTAV Office	
1.2.1	I, II	First release	JTAV Office	Apr 99
1.2.2	I, II	Second release	JTAV Office	Sep 99
1.2.3	I, II	Third release	JTAV Office	Mar 00
1.3	I, II	Integrate data sources	JTAV Office	
1.3.1	I, II	Secondary items	JTAV Office	
1.3.1.1	I, II	Wholesale	JTAV Office	
1.3.1.1.1	I, II	First increment	JTAV Office	Apr 99
1.3.1.1.2	I, II	Second increment	JTAV Office	Sep 99
1.3.1.1.3	I, II	Third increment	JTAV Office	Mar 00
1.3.1.2	I, II	Retail	JTAV Office	
1.3.1.2.1	I, II	First increment	JTAV Office	Apr 99
1.3.1.2.2	I, II	Second increment	JTAV Office	Sep 99
1.3.1.2.3	I, II	Third increment	JTAV Office	Mar 00
1.3.2	I, II	Ammunition	JTAV Office	
1.3.2.1	I, II	First increment	JTAV Office	Apr 99
1.3.2.2	I, II	Second increment	JTAV Office	Sep 99
1.3.3	I, II	Medical	JTAV Office	
1.3.3.1	I, II	First increment	JTAV Office	Apr 99
1.3.3.2	I, II	Second increment	JTAV Office	Sep 99

Task number	Strategy	Action task	Lead office	Date
1.3.4	I, II	Fuel	JTAV Office	
1.3.4.1	I, II	First increment	JTAV Office	Jun 99
1.3.4.2	I, II	Second increment	JTAV Office	Dec 99
1.3.5	I, II	Personnel	JTAV Office	
1.3.5.1	I, II	First increment	JTAV Office	Jun 99
1.3.5.2	I, II	Second increment	JTAV Office	Mar 00
1.3.6	I, II	Units	JTAV Office	
1.3.6.1	I, II	First increment	JTAV Office	Jun 99
1.3.6.2	I, II	Second increment	JTAV Office	Jun 00
1.3.7	I, II	Weapon systems	JTAV Office	
1.3.7.1	I, II	First increment	JTAV Office	Jun 99
1.3.7.2	I, II	Second increment	JTAV Office	Sep 00
1.3.8	I, II	Weapon systems life cycle	JTAV Office	
1.3.8.1	I, II	First increment	JTAV Office	Sep 99
1.3.8.2	I, II	Second increment	JTAV Office	Dec 00
1.4	I, II	Develop dictionary and directory	JTAV Office	
1.4.1	I, II	First release	JTAV Office	Apr 99
1.4.2	I, II	Second release	JTAV Office	Aug 99
1.4.3	I, II	Third release	JTAV Office	Feb 00
1.5	I, II	Migrate to in-theater sites	JTAV Office	
1.5.1	I, II	USEUCOM	JTAV Office	Sep 99
1.5.2	I, II	USACOM	JTAV Office	Nov 99
1.5.3	I, II	USPACOM	JTAV Office	Jan 00
1.5.4	I, II	USCENTCOM	JTAV Office	Feb 00
1.5.5	I, II	USSOCOM	JTAV Office	Apr 00
1.5.6	I, II	USSOUTHCOM	JTAV Office	Jun 00
1.5.7	I, II	USSTRATCOM	JTAV Office	Aug 00
1.6	I, II	Field to CONUS sites	JTAV Office	
1.6.1	II, III, IV	Common Operational Picture	JTAV Office	Apr 99
1.6.2	II, III, IV	Advanced Concept Technology Demonstration	JTAV Office	Jun 99
1.6.3	II, III, IV	Business Process Reengineering	JTAV Office	Jun 99
1.7	IV	Migrate to CONUS operational support	JTAV Office	
1.7.1	IV	Maintain repository	JTAV Office	Apr 99
1.7.2	IV	Establish operational support capability	JTAV Office	Aug 99

Note 1: This milestone will be repeated for each instance of migrating to in-theater sites as described in milestone 1.5.

Note 2: This milestone will be implemented by a memorandum of agreement between the JTAV Office and the services. It will be repeated for each instance of fielding to CONUS users as described in milestone 1.6.

General Note: USSOCOM = U.S. Special Operations Command; USSOUTHCOM = U.S. Southern Command; USSTRATCOM = U.S. Strategic Command.

Table Appendix A -2. Milestones External to the JTAV Office

Task number	Strategy	Action task	Lead office	Date
2.1	I, II	Provide secure data exchange capability across security boundaries	DISA	
2.1.1	I, II	Type certification	DISA and JCS J-6	Dec 99
2.1.2	I, II	SABI tested and approved	DISA	Dec 99
2.2	I, II	Provide access controls	DISA	
2.2.1	I, II	Secure socket layer certificates for browsers	DISA	Jun 99
2.2.2	I, II	Provide password encryption	DISA	
2.2.2.1	I, II	Application to mediator	DISA	Sep 99
2.2.2.2	I, II	Data sources	DISA	Sep 99
2.3	I, II, III, IV	Ensure adequate communications capacity and infrastructure	DISA	Site by site
2.4	I, II, III, IV	Develop funding strategies		
2.4.1	I, II, III, IV	Data source integration	DUSD(L)	Jun 99
2.4.2	I, II, III, IV	Operation at data source	DUSD(L)	Jun 99
2.4.3	I, II, III, IV	Query load and processing	DUSD(L)	Jun 99
2.4.4	I, II, III, IV	Operational support capability	DUSD(L)	Jun 99
2.4.5	I, II, III, IV	Operation of JTAV data environment	DUSD(L)	Jun 99
2.5	I, II, III, IV	Access data sources		
2.5.1	I, II	Negotiate memorandum of agreement	Services and agencies	TBA
2.5.2	I, II	Prepare shared data requests	Services and agencies	Note 3
2.5.3	I, II	Prepare shared data specifications	Services and agencies	Note 3
2.5.4	I, II	Implement data interface	Services and agencies	Note 3
2.6	I, II	Field the capability		
2.6.1	I, II	Theater		
2.6.1.1	I, II	Ensure adequate infrastructure	CINC	Note 1
2.6.1.1.1	I, II	Acquire necessary hardware	CINC	Note 1
2.6.1.1.2	I, II	Acquire necessary software	CINC	Note 1
2.6.1.1.3	I, II	Ensure adequate communications	CINC and DISA	Note 1
2.6.1.2	I, II	Develop policy and procedures	CINC	Note 1
2.6.1.3	I, II	Provide adequate security	CINC and DISA	Note 1
2.6.2	I, II	CONUS		
2.6.2.1	I, II	Ensure adequate infrastructure	Services and agencies	Note 2
2.6.2.1.1	I, II	Acquire necessary hardware	Services and agencies	Note 2
2.6.2.1.2	I, II	Acquire necessary software	Services and agencies	Note 2

Task number	Strategy	Action task	Lead office	Date
2.6.2.1.3	I, II	Ensure adequate communications	Services and agencies	Note 2
2.6.2.2	I, II	Develop policy and procedures	Services and agencies	Note 2
2.6.2.3	I, II	Provide adequate security	Services and agencies	Note 2
2.7	II, III, IV	Identify requirements	JCS J-4	
2.8	II, III, IV	Develop user tools		
2.8.1	II, III, IV	Common Operational Picture	DISA	Jun 99
2.8.2	II, III, IV	Joint Logistics—Advanced Concept Technology Demonstration	DARPA	Jun 99
2.8.3	II, III, IV	Business Process Reengineering	Services and agencies	Sep 99

Note 1: This milestone will be repeated for each instance of migrating to in-theater sites as described in milestone 1.5.

Note 2: This milestone will be implemented by a memorandum of agreement between the JTAV Office and the services. It will be repeated for each instance of fielding to CONUS users as described in milestone 1.6.

Note 3: This milestone will be repeated for each instance of obtaining data access described in milestone 1.3.

General Note: TBA = to be announced.

EXTERNAL ORGANIZATION TASKS

The tasks and milestones in Table Appendix A -2 are those associated with or-ganizations external to the JTAV Office. For JTAV to be successful, hard work and cooperation of many organizations are required. Each organization identi-fied in Table Appendix A -2 should closely review the responsibilities to de-termine if they can be accomplished in the required time.

Task 2.1 Provide Secure Data Exchange Capability Across Security Boundaries

The JTAV system architecture needs to support user access to asset status data for both classified and unclassified data sources. Users obtaining access to JTAV ca-pabilities through an infrastructure supporting only unclassified operations shall only be allowed access to unclassified data sources. Users accessing JTAV through an infrastructure supporting a secret environment shall be provided access to both unclassified data sources and data sources classified up to secret. The gen-eral approach is for a user to obtain data access via the JTAV application config-ured within the enclave that the user wishes to access. For example, in those cases where a user is attached to a secret enclave and wishes secret information, the JTAV application in the secret enclave submits the queries to the mediator. In cases where a user is attached to a secret enclave and wants to obtain unclassified data, a query would be sent from the JTAV application in the secret enclave to the

JTAV application in the unclassified enclave that submits the query to the mediator.

Task 2.2 Provide Access Controls

The two primary access control functions that need to be supported across the JTAV system architecture are user identification and authentication and data access control. Only authorized users will be permitted to access data through the JTAV data environment. The proposed approach to providing these controls is to assign user identifications and authenticate the identity with a password. This approach will require JTAV components transmitting user identification and password information over unprotected communication circuits to use secure sockets to encrypt the user identification and password data. Both the JTAV application and the mediator will

♦ maintain an access control list to identify and authenticate users,

♦ maintain logs of user requests to access data sources and events related to the access provided, [1]

♦ be capable of locking user accounts in the case of security events or alarms, and

♦ record unauthorized attempts to enter the JTAV application.

Task 2.3 Ensure Adequate Communications Capacity and Infrastructure

DISA is responsible for providing communication services between user facilities to support the JTAV capability. DISA will determine if an adequate supply of both classified and unclassified lines exists and if the lines can transfer the expected loads generated by the requests for exchange of JTAV data, both in peacetime and wartime.

Task 2.4 Develop Funding Strategies

With input and assistance from the JTAV Office, the DUSD(L), as the functional proponent for JTAV, is responsible for identifying and providing required funding. The DUSD(L) also needs to develop funding strategies and policies to support integration of data sources into the JTAV data environment, the method of payment for query processing at megacenters, the long-term operational support capability, and the operation of the overall JTAV data environment. Finally, the DUSD(L) will establish priorities for providing the JTAV capability to additional user communities. Several funding issues remain to be resolved. The DUSD(L) will base

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[1] The logs will relate the events to the user who initiates the request.

funding decisions on requirements and priorities after full consultation with CINCs, services, agencies, and other users.

Task 2.5 Access Data Sources

The "to be" JTAV capability is based on data sharing. Shared data are created and maintained only in a single, authoritative database, and the data are accessible to users from different applications by direct query into the authoritative database. The JTAV data-sharing process consists of the following four steps:

◆ *Memorandum of agreement*. The memorandum of agreement identifies the specific responsibilities of the component and the JTAV Office in the data-sharing process. It also identifies the component action officer.

◆ *Data-sharing request.* The data-sharing request identifies the information exchange requirements and the specific data elements requested.

◆ *Data-sharing specification.* The data-sharing specification describes the required infrastructure components. It identifies any required translation as well as data quality guarantees from the data provider and data security constraints on JTAV.

◆ *Data-sharing implementation.* Implementation includes the data access mechanism and as-built documentation. The JTAV dictionary and directory will be updated and become a configuration item.

Task 2.6 Field the Capability

The external organizations' requirements for fielding the JTAV capability are the same for a theater and CONUS. The difference is the responsible organization. In a theater the CINC is responsible. In CONUS, responsibility belongs to the services and agencies. The primary responsibility is to ensure an adequate infrastructure to support the JTAV requirements. The infrastructure includes facilities, hardware, software, local communications capability, and security. Additionally, users need to develop policies and procedures to provide guidance as to who can access certain data and how the data will be used.

Task 2.7 Identify Requirements

The functional proponent should identify and consolidate requirements from field units and advocate those requirements to the JTAV Office for inclusion in future releases. In the interest of developing one team, the functional proponent should also advocate JTAV to the field. The requirements should be stated in terms of required data elements, known sources, and use for the data.

Task 2.8 Develop User Tools

The JTAV Office is not equipped, staffed, or chartered to develop tools to use the JTAV data. That requirement rests solely with the users of the data and their agents. The JTAV Office will facilitate and advocate the development and use of those tools, and will provide data to support them. Each developer of a tool who plans to use JTAV data should determine data elements, how the data will be used, and the data source (if not currently available from JTAV).